## Claims:

## 1. A compound of formula (I):

wherein:

5

A is a direct bond or  $C_{1-2}$ alkylene; wherein said  $C_{1-2}$ alkylene may be optionally substituted by one or more  $\mathbb{R}^{22}$ ;

Ring C is carbocyclyl or heterocyclyl;

10 R<sup>1</sup> and R<sup>4</sup> are independently selected from hydrogen, halo, nitro, cyano, hydroxy, trifluoromethoxy, amino, carboxy, carbamoyl, mercapto, sulphamoyl, C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkanoyl, C<sub>1-6</sub>alkanoyloxy, N-(C<sub>1-6</sub>alkyl)amino, NN-(C<sub>1-6</sub>alkyl)<sub>2</sub>amino, C<sub>1-6</sub>alkanoylamino, N-(C<sub>1-6</sub>alkyl)carbamoyl, NN-(C<sub>1-6</sub>alkyl)<sub>2</sub>carbamoyl, C<sub>1-6</sub>alkylS(O)<sub>a</sub> wherein a is 0 to 2, C<sub>1-6</sub>alkoxycarbonyl, N-(C<sub>1-6</sub>alkyl)<sub>2</sub>sulphamoyl, C<sub>1-6</sub>alkylsulphonylamino, carbocyclyl

N-(C<sub>1-6</sub>alkyl)sulphamoyl, N, N-(C<sub>1-6</sub>alkyl)<sub>2</sub>sulphamoyl, C<sub>1-6</sub>alkylsulphonylamino, carbocyclyl or heterocyclyl; wherein  $R^1$  and  $R^4$  independently of each other may be optionally substituted on carbon by one or more  $R^8$ ; and wherein if said heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from  $R^9$ ;

R<sup>2</sup> is selected from halo, nitro, cyano, hydroxy, trifluoromethoxy, amino, carboxy,

carbamoyl, mercapto, sulphamoyl, C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>1-6</sub>alkoxy,

C<sub>1-6</sub>alkanoyl, C<sub>1-6</sub>alkanoyloxy, N-(C<sub>1-6</sub>alkyl)amino, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>amino,

C<sub>1-6</sub>alkanoylamino, N-(C<sub>1-6</sub>alkyl)carbamoyl, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>carbamoyl, C<sub>1-6</sub>alkylS(O)<sub>a</sub>

wherein a is 0 to 2, C<sub>1-6</sub>alkoxycarbonyl, N-(C<sub>1-6</sub>alkyl)sulphamoyl,

N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>sulphamoyl, C<sub>1-6</sub>alkylsulphonylamino, carbocyclyl or heterocyclyl; wherein

R<sup>2</sup> may be optionally substituted on carbon by one or more R<sup>10</sup>; and wherein if said

30

heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from R<sup>11</sup>;

R³ is selected from halo, nitro, cyano, hydroxy, trifluoromethoxy, amino, carboxy, carbamoyl, mercapto, sulphamoyl, C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>1-6</sub>alkoxy,

5 C<sub>1-6</sub>alkanoyl, C<sub>1-6</sub>alkanoyloxy, N-(C<sub>1-6</sub>alkyl)amino, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>amino,

C<sub>1-6</sub>alkanoylamino, N-(C<sub>1-6</sub>alkyl)carbamoyl, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>carbamoyl, C<sub>1-6</sub>alkylS(O)<sub>a</sub>

wherein a is 0 to 2, C<sub>1-6</sub>alkoxycarbonyl, N-(C<sub>1-6</sub>alkyl)sulphamoyl,

N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>sulphamoyl, C<sub>1-6</sub>alkylsulphonylamino, carbocyclyl or heterocyclyl; wherein

R³ may be optionally substituted on carbon by one or more R¹²; and wherein if said

10 heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from R¹³;

 $R^5$  is hydrogen or optionally substituted  $C_{1-6}$ alkyl; wherein said optional substituents are selected from one or more  $R^{14}$ ;

trifluoromethoxy, amino, carboxy, carbamoyl, mercapto, sulphamoyl, C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkanoyl, C<sub>1-6</sub>alkanoyloxy, N-(C<sub>1-6</sub>alkyl)amino, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>amino, C<sub>1-6</sub>alkanoylamino, N-(C<sub>1-6</sub>alkyl)<sub>2</sub>carbamoyl, C<sub>1-6</sub>alkylS(O)<sub>a</sub> wherein a is 0 to 2, C<sub>1-6</sub>alkoxycarbonyl, N-(C<sub>1-6</sub>alkyl)<sub>2</sub>sulphamoyl, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>sulphamoyl, C<sub>1-6</sub>alkylsulphonylamino, carbocyclyl or heterocyclyl; wherein R<sup>6</sup> and R<sup>7</sup> independently of each other may be optionally substituted on carbon by one or more R<sup>15</sup>; and wherein if said heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from R<sup>16</sup>;

or R<sup>6</sup> and R<sup>7</sup> together with the pyrimidine bond to which they are attached form a 5 or 6 membered carbocyclic ring or a 5 or 6 membered heterocyclic ring wherein said ring is fused to the pyrimidine of formula (I); wherein the double bonds of the resulting bicyclic ring may be further delocalised across the whole of the bicyclic ring; and wherein said carbocyclic ring or heterocyclic ring may be optionally substituted on carbon by one or more R<sup>17</sup>; and wherein if said heterocyclic ring contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from R<sup>18</sup>;

n = 0, 1, 2 or 3; wherein the values of  $R^3$  may be the same or different;

 $R^8$ ,  $R^{10}$ ,  $R^{12}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{17}$  and  $R^{22}$  are independently selected from halo, nitro, cyano, hydroxy, trifluoromethoxy, amino, carboxy, carbamoyl, mercapto, sulphamoyl,  $C_{1-6}$ alkyl,  $C_{2-6}$ alkenyl,  $C_{2-6}$ alkynyl,  $C_{1-6}$ alkoxy,  $C_{1-6}$ alkanoyl,  $C_{1-6}$ alkanoyl,  $C_{1-6}$ alkyl)amino,

10

25

30

N,N- $(C_{1-6}alkyl)_2$ amino,  $C_{1-6}alkanoylamino$ , N- $(C_{1-6}alkyl)$ carbamoyl, N,N- $(C_{1-6}alkyl)_2$ carbamoyl,  $C_{1-6}alkylS(O)_a$  wherein a is 0 to 2,  $C_{1-6}alkoxycarbonyl$ , N- $(C_{1-6}alkyl)_3$ sulphamoyl, N,N- $(C_{1-6}alkyl)_2$ sulphamoyl,  $C_{1-6}alkyl$ sulphonylamino, carbocyclyl or heterocyclyl; wherein  $R^8$ ,  $R^{10}$ ,  $R^{12}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{17}$  and  $R^{22}$  independently of each other may be optionally substituted on carbon by one or more  $R^{19}$ ; and wherein if said heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from  $R^{20}$ ;

 $R^9$ ,  $R^{11}$ ,  $R^{13}$ ,  $R^{16}$ ,  $R^{18}$  and  $R^{20}$  are independently selected from  $C_{1-6}$ alkyl,  $C_{1-6}$ alkanoyl,  $C_{1-6}$ alkylsulphonyl,  $C_{1-6}$ alkoxycarbonyl, carbamoyl, N-( $C_{1-6}$ alkyl)carbamoyl,

N,N-(C<sub>1-6</sub>alkyl)carbamoyl, benzyl, benzyloxycarbonyl, benzoyl and phenylsulphonyl; wherein  $R^9$ ,  $R^{11}$ ,  $R^{13}$ ,  $R^{16}$ ,  $R^{18}$  and  $R^{20}$  independently of each other may be optionally substituted on carbon by on or more  $R^{21}$ ;

R<sup>19</sup> and R<sup>21</sup> are independently selected from halo, nitro, cyano, hydroxy, trifluoromethoxy, amino, carboxy, carbamoyl, mercapto, sulphamoyl, C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkanoyl, C<sub>1-6</sub>alkanoyloxy, N-(C<sub>1-6</sub>alkyl)amino, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>amino, C<sub>1-6</sub>alkanoylamino, N-(C<sub>1-6</sub>alkyl)<sub>2</sub>carbamoyl, C<sub>1-6</sub>alkylS(O)<sub>a</sub> wherein a is 0 to 2, C<sub>1-6</sub>alkoxycarbonyl, N-(C<sub>1-6</sub>alkyl)<sub>2</sub>sulphamoyl, C<sub>1-6</sub>alkylsulphonylamino, carbocyclyl or heterocyclyl; wherein R<sup>19</sup> and R<sup>21</sup> independently of each other may be optionally substituted on carbon by one or more R<sup>23</sup>; and wherein if said heterocyclyl contains an -NH-moiety that nitrogen may be optionally substituted by a group selected from R<sup>24</sup>;

R<sup>23</sup> is selected from halo, nitro, cyano, hydroxy, trifluoromethoxy, trifluoromethyl, amino, carboxy, carbamoyl, mercapto, sulphamoyl, methyl, ethyl, methoxy, ethoxy, acetyl, acetoxy, methylamino, ethylamino, dimethylamino, diethylamino, *N*-methyl-*N*-ethylamino, acetylamino, *N*-methylcarbamoyl, *N*-ethylcarbamoyl, *N*, *N*-dimethylcarbamoyl, *N*, *N*-diethylcarbamoyl, *N*-methyl-*N*-ethylcarbamoyl, methylthio, ethylthio, methylsulphinyl, ethylsulphinyl, mesyl, ethylsulphonyl, methoxycarbonyl, ethoxycarbonyl, *N*-methylsulphamoyl, *N*-ethylsulphamoyl, *N*, *N*-dimethylsulphamoyl, *N*, *N*-diethylsulphamoyl or *N*-methyl-*N*-ethylsulphamoyl; and

 $\mathbf{R}^{24}$  is selected from  $C_{1-6}$ alkyl,  $C_{1-6}$ alkanoyl,  $C_{1-6}$ alkylsulphonyl,  $C_{1-6}$ alkoxycarbonyl, carbamoyl,  $N-(C_{1-6}$ alkyl)carbamoyl, benzyl, benzyloxycarbonyl, benzyl and phenylsulphonyl; or a pharmaceutically acceptable salt thereof;

with the proviso that said compound is not:

 $5-bromo-N^4-(5-methyl-1H-pyrazol-3-yl)-N^2-[1-(2-pyridinyl)propyl]-2,4-pyrimidinediamine;\\ 5-chloro-N^4-(5-methyl-1H-pyrazol-3-yl)-N^2-[1-(2-pyridinyl)propyl]-2,4-pyrimidinediamine;\\ 5-bromo-N^2-[1-(3-methyl-5-isoxazolyl)ethyl]-N^4-(5-methyl-1H-pyrazol-3-yl)-2,4-pyrimidinediamine;\\ 5-bromo-N^2-[1-(3-methyl-5-isoxazolyl)ethyl]-N^4-(5-methyl-5-isoxazolyl)ethyl]$ 

5 pyrimidinediamine;

25

- 5-chloro-N<sup>2</sup>-[1-(3-methyl-5-isoxazolyl)ethyl]-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-2,4-pyrimidinediamine;
- 5-bromo-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(3-pyridinyl)propyl]-2,4-pyrimidinediamine; 5-chloro-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(3-pyridinyl)propyl]-2,4-pyrimidinediamine;
- 5-chloro-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(3-pyridinyl)ethyl]-2,4-pyrimidinediamine; 5-bromo-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(3-pyridinyl)ethyl]-2,4-pyrimidinediamine; or 5-bromo-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(2-pyridinyl)ethyl]-2,4-pyrimidinediamine.
- 2. A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to claim 1 wherein A is a direct bond.
  - 3. A compound of formula (I), or a pharmaceutically acceptable salt thereof, according either claim 1 or 2 wherein Ring C is phenyl, thienyl, pyridyl, thiazolyl.
- 4. A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to any one of claims 1-3 wherein R<sup>1</sup> is selected from hydrogen, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkoxy, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>amino, C<sub>1-6</sub>alkylS(O)<sub>a</sub> wherein a is 0 or carbocyclyl; wherein R<sup>1</sup> may be optionally substituted on carbon by one or more R<sup>8</sup>; wherein R<sup>8</sup> is selected from halo or carbocyclyl.
  - 5. A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to any one of claims 1-4 wherein R<sup>4</sup> is hydrogen.
- 6. A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to any one of claims 1-5 wherein:

 $R^2$  is selected from  $C_{1-6}$ alkyl; wherein  $R^2$  may be optionally substituted on carbon by one or more  $R^{10}$ ;

20

25

30

 $R^{10}$  is selected from halo, hydroxy, carboxy, amino,  $C_{1-6}$ alkoxy,  $N,N-(C_{1-6}$ alkyl)<sub>2</sub>amino,  $C_{1-6}$ alkanoylamino,  $N-(C_{1-6}$ alkyl)<sub>2</sub>carbamoyl,  $N,N-(C_{1-6}$ alkyl)<sub>2</sub>carbamoyl or heterocyclyl; wherein  $R^{10}$  may be optionally substituted on carbon by one or more  $R^{19}$ ; and wherein if said heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from  $R^{20}$ ;

 $R^{19}$  is selected from hydroxy or  $C_{1-6}$ alkoxy;  $R^{20}$  is selected from  $C_{1-6}$ alkyl.

- 7. A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to ant one of claims 1-6 wherein R<sup>3</sup> is selected from halo, nitro, C<sub>1-6</sub>alkyl or C<sub>1-6</sub>alkoxy; wherein R<sup>3</sup> may be optionally substituted on carbon by one or more R<sup>12</sup>; and R<sup>12</sup> is selected from halo.
- 8. A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to any one of claims 1-7 wherein R<sup>5</sup> is hydrogen or optionally substituted C<sub>1-6</sub>alkyl; wherein said optional substituents are selected from one or more R<sup>14</sup>; and R<sup>14</sup> is selected from hydroxy.
  - 9. A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to any one of claims 1-8 wherein:

R<sup>6</sup> and R<sup>7</sup> are independently selected from hydrogen, halo, nitro, cyano, amino, C<sub>1-6</sub>alkyl, N-(C<sub>1-6</sub>alkyl)amino, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>amino, N-(C<sub>1-6</sub>alkyl)carbamoyl, C<sub>1-6</sub>alkoxycarbonyl or heterocyclyl; wherein R<sup>6</sup> and R<sup>7</sup> independently of each other may be optionally substituted on carbon by one or more R<sup>15</sup>; and wherein if said heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from R<sup>16</sup>;

or R<sup>6</sup> and R<sup>7</sup> together with the pyrimidine bond to which they are attached form a 6 membered carbocyclic ring or a 5 or 6 membered heterocyclic ring wherein said ring is fused to the pyrimidine of formula (I); wherein the double bonds of the resulting bicyclic ring may be further delocalised across the whole of the bicyclic ring; and wherein said carbocyclic ring or heterocyclic ring may be optionally substituted on carbon by one or more R<sup>17</sup>; and wherein if said heterocyclic ring contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from R<sup>18</sup>;

25

R<sup>15</sup> is selected from halo, hydroxy, amino, C<sub>1-6</sub>alkoxy, N,N-(C<sub>1-6</sub>alkyl)<sub>2</sub>amino, carbocyclyl or heterocyclyl; wherein R<sup>15</sup> may be optionally substituted on carbon by one or more R<sup>19</sup>; and wherein if said heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group selected from R<sup>20</sup>;

 $R^{17}$  is selected from halo,  $C_{1-6}$ alkyl or  $C_{1-6}$ alkoxy; wherein  $R^{17}$  may be optionally substituted on carbon by one or more R<sup>19</sup>;

R<sup>16</sup> is selected from C<sub>1-6</sub>alkyl;

R<sup>18</sup> is selected from C<sub>1-6</sub>alkanoyl;

R<sup>19</sup> is selected from halo, hydroxy, C<sub>1-6</sub>alkoxy or heterocyclyl; and wherein if said heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by a group 10 selected from R<sup>24</sup>;

> R<sup>20</sup> is selected from C<sub>1-6</sub>alkyl; and  $R^{24}$  is selected from  $C_{1-6}$ alkyl.

- A compound of formula (I), or a pharmaceutically acceptable salt thereof, according 10. 15 to any one of claims 1-9 wherein n = 0 or 1.
  - A compound of formula (I) (as depicted in claim 1) wherein: 11.

A is a direct bond;

Ring C is phenyl, thienyl, pyridyl, thiazolyl; 20

R<sup>1</sup> is selected from hydrogen, methyl, ethyl, isopropyl, t-butyl, trifluoromethyl, cyclopropylmethyl, benzyl, methoxy, ethoxy, propoxy, isopropoxy, sec-butoxy, dimethylamino, methylthio or cyclopropyl;

R<sup>2</sup> is selected from methyl, ethyl, trifluoromethyl, hydroxymethyl, carboxymethyl, aminomethyl, methoxymethyl, morpholinomethyl, 1-hydroxyethyl, 2-hydroxyethyl, 1carboxyethyl, 2-dimethylaminoethyl, 2-diethylaminoethyl, acetamidomethyl, 2-[N-methyl-N-(2-methoxyethyl)amino]ethyl, 2-[N-methyl-N-(2-hydroxyethyl)amino]ethyl, 2-(Nmethylcarbamoyl)ethyl, 2-[N-(2-hydroxyethyl)carbamoyl]ethyl, <math>2-(N,N-1)dimethylcarbamoyl)ethyl, 2-morpholinoethyl, 2-pyrrolidin-1-ylethyl or 2-(1-methylpiperazin-4-yl)ethyl, 1-methyl-2-hydroxyethyl; 30

R<sup>3</sup> is selected from fluoro, nitro, trifluoromethyl or methoxy;

R<sup>4</sup> is hydrogen;

R<sup>5</sup> is hydrogen, methyl or 2-hydroxyethyl;

10

15

20

25

R<sup>6</sup> and R<sup>7</sup> are independently selected from hydrogen, fluoro, chloro, bromo, nitro, cyano, amino, methyl, methylamino, ethylamino, propylamino, isopropylamino, dimethylamino, N-methyl-N-propylamino, N-ethylcarbamoyl, methoxycarbonyl, ethoxycarbonyl, butoxycarbonyl, morpholino, pyrrolidinyl or piperazinyl; wherein R<sup>6</sup> and R<sup>7</sup> independently of each other may be optionally substituted on carbon by one or more R<sup>15</sup>; and wherein said piperazinyl may be optionally substituted on nitrogen by a group selected from R<sup>16</sup>;

or R<sup>6</sup> and R<sup>7</sup> together with the pyrimidine to which they are attached form a bicyclic ring selected from quinazolinyl, thieno[3,2-d]pyrimidinyl, thieno[2,3-d]pyrimidinyl, 1*H*-pyrazolo[3,4-d]pyrimidinyl, thieno[3,4-d]pyrimidinyl, pyrido[2,3-d]pyrimidinyl, 5,6,7,8-tetrahydro-pyrido[2,3-d]pyrimidinyl or 5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidinyl; and wherein said bicyclic ring may be optionally substituted on carbon by one or more R<sup>17</sup>; and wherein said 5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidinyl, 5,6,7,8-tetrahydro-pyrido[2,3-d]pyrimidinyl or 5,6,7,8-tetrahydro-pyrido[3,4-d]pyrimidinyl may be optionally substituted on nitrogen by a group selected from R<sup>18</sup>;

R<sup>15</sup> is selected from fluoro, hydroxy, amino, ethoxy, dimethylamino, phenyl, pyrrolidinyl, piperazinyl or morpholino; wherein R<sup>15</sup> may be optionally substituted on carbon by one or more R<sup>19</sup>; and wherein said piperazinyl may be optionally substituted on nitrogen by a group selected from R<sup>20</sup>;

R<sup>16</sup> is selected from methyl;

R<sup>17</sup> is selected from fluoro, chloro, methyl, methoxy, ethoxy or propoxy; wherein R<sup>17</sup> may be optionally substituted on carbon by one or more R<sup>19</sup>;

R<sup>18</sup> is selected from acetyl;

R<sup>19</sup> is selected from fluoro, hydroxy, methoxy, piperazinyl, pyrrolidinyl or morpholino; and wherein said piperazinyl may be optionally substituted on nitrogen by a group selected from R<sup>24</sup>;

R<sup>20</sup> is selected from methyl;

R<sup>24</sup> is selected from methyl;

n = 0 or 1;

30 or a pharmaceutically acceptable salt thereof;

with the proviso that said compound is not:

5-bromo-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(2-pyridinyl)propyl]-2,4-pyrimidinediamine; 5-chloro-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(2-pyridinyl)propyl]-2,4-pyrimidinediamine;

- 5-bromo-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(3-pyridinyl)propyl]-2,4-pyrimidinediamine; 5-chloro-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(3-pyridinyl)propyl]-2,4-pyrimidinediamine; 5-chloro-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(3-pyridinyl)ethyl]-2,4-pyrimidinediamine; 5-bromo-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(2-pyridinyl)ethyl]-2,4-pyrimidinediamine; 5-bromo-N<sup>4</sup>-(5-methyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[1-(2-pyridinyl)ethyl]-2,4-pyrimidinediamine.
  - 12. A compound of formula (I) (as depicted in claim 1) selected from: (2R)-2-({4-[(5-cyclopropyl-1H-pyrazol-3-yl)amino}-5-fluoropyrimidin-2-yl}amino)-2-(4-fluorophenyl)ethanol;
- 5-bromo-N<sup>4</sup>-(3-cyclopropyl-1*H*-pyrazol-5-yl)-N<sup>2</sup>-[(1*S*)-1-(4-fluorophenyl)ethyl]pyrimidine-2,4-diamine;
  - (2R)-2-({5-chloro-4-[(3-cyclopropyl-1*H*-pyrazol-5-yl)amino]pyrimidin-2-yl}amino)-2-(4-fluorophenyl)ethanol;
  - (2R)-2-({5-chloro-4-[(3-isopropoxy-1H-pyrazol-5-yl)amino]pyrimidin-2-yl}amino)-2-(4-
- 15 fluorophenyl)ethanol;
  - (3S)-3-({5-chloro-4-[(5-cyclopropyl-1*H*-pyrazol-3-yl)amino]pyrimidin-2-yl}amino)-3-(4-fluorophenyl)-*N*-methylpropanamide;
  - 2-({5-chloro-2-{[(1S)-1-(4-fluorophenyl)ethyl]amino}-6-[(5-isopropoxy-1H-pyrazol-3-yl)amino]pyrimidin-4-yl}amino)propane-1,3-diol;
- 2-[(5-chloro-6-[(3-cyclopropyl-1H-pyrazol-5-yl)amino]-2-{[(1S)-1-(4-fluorophenyl)ethyl] amino}pyrimidin-4-yl)amino]propane-1,3-diol;
  - 5-chloro-N<sup>4</sup>-(5-cyclopropyl-1H-pyrazol-3-yl)-N<sup>2</sup>-[(1S)-(4-fluoro-phenyl)-ethyl]-6-(4-methyl-piperazin-1-yl)-pyrimidine-2,4-diamine;
  - (2R)-2-({4-[(5-cyclopropyl-1H-pyrazol-3-yl)amino]-7-fluoroquinazolin-2-yl}amino)-2-(4-
- 25 fluorophenyl)ethanol; and
  - 2-[(5-chloro-6-[(5-cyclopropyl-1H-pyrazol-3-yl)amino]-2-{[(1R)-1-(4-fluorophenyl)-2-hydroxyethyl]amino}pyrimidin-4-yl)amino]propane-1,3-diol; or a pharmaceutically acceptable salt thereof.
- 30 13. A process for preparing a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, which process comprises of:

  Process a) reaction of a pyrimidine of formula (II):

wherein L is a displaceable group; with an pyrazole amine of formula (III):

5

 $\mathbf{or}$ 

Process b) reacting a pyrimidine of formula (IV):

wherein L is a displaceable group; with a compound of formula (V):

Process c) reacting a compound of formula (VI):

$$R^{5}$$
 $R^{5}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{3}$ 

with a compound of formula (VII):

5

wherein X is an oxygen atom and q is 1; or X is a nitrogen atom and q is 2; and wherein each  $R^{20}$  independently represents a  $C_{1\text{-}6}$ alkyl group; or

Process d) reacting a compound of formula (VIII):

$$\begin{array}{c|c}
R^{6} & R^{7} & H & R^{4} \\
\hline
 & N & N & S & O
\end{array}$$

$$\begin{array}{c|c}
R^{5} & N & R^{2} \\
\hline
 & C & (R^{3})_{n}
\end{array}$$
(VIII)

10

with hydrazine; or

and thereafter if necessary:

- i) converting a compound of the formula (I) into another compound of the formula (I);
- ii) removing any protecting groups;
- 15 iii) forming a pharmaceutically acceptable salt.

15

- 14. A compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, for use as a medicament.
- 15. The use of a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, in the manufacture of a medicament for use in the inhibition of Trk activity.
  - 16. The use of a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, in the manufacture of a medicament for use in the treatment or prophylaxis of cancer.
  - 17. The use of a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, in the manufacture of a medicament for use in the production of an anti-proliferative effect.
  - 18. A method of inhibiting Trk activity comprising administering to a host in need of such treatment a therapeutically effective amount of a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12.
- 20 19. A method for the treatment or prophylaxis of cancer comprising administering a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12.
- 20. A method of producing an anti-proliferative effect in a warm-blooded animal, such as man, in need of such treatment which comprises administering to said animal an effective amount of a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12.
- 21. A pharmaceutical composition comprising a compound of formula (I), or a

  pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, together with
  at least one pharmaceutically acceptable carrier, diluent or excipient.

22. A pharmaceutical composition comprising a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, together with at least one pharmaceutically acceptable carrier, diluent or excipient for use in the inhibition of Trk activity.

5

23. A pharmaceutical composition comprising a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, together with at least one pharmaceutically acceptable carrier, diluent or excipient for use in the treatment or prophylaxis of cancer.

10

24. A pharmaceutical composition comprising a compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, together with at least one pharmaceutically acceptable carrier, diluent or excipient for use in the production of an anti-proliferative effect in a warm-blooded animal such as man.

15

- 25. A compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, for use in the inhibition of Trk activity.
- 26. A compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, for use in the treatment or prophylaxis of cancer.
  - 27. A compound of formula (I), or a pharmaceutically acceptable salt thereof, as claimed in any one of claims 1-12, for use in the production of an anti-proliferative effect.
- 28. The method or use according to claims 16, 19, 23 or 26 wherein said cancer is selected from oesophageal cancer, myeloma, hepatocellular, pancreatic, cervical cancer, ewings tumour, neuroblastoma, kaposis sarcoma, ovarian cancer, breast cancer, colorectal cancer, prostate cancer, bladder cancer, melanoma, lung cancer non small cell lung cancer (NSCLC), small cell lung cancer (SCLC), gastric cancer, head and neck cancer, renal cancer, lymphoma, leukaemia, tumours of the central and peripheral nervous system, melanoma, fibrosarcoma and osteosarcoma.